

Work Order ID 89609

August-27-12 2:02:04 PM

PRELIMINARY ISSUE

OK 8/28/12

89609

Page 1

Item ID: D3189-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Chafing Shield
 Start Date: 8/27/12 Start Qty: 8.00 *8* Cust Item ID:
 Required Date: 8/27/12 Req'd Qty: 8.00 *8* Customer:
 Reference:

Approvals: Process Plan: W Date: Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|----------------------------|
| D3189 | PC1 / D3189 Rev. B 8/28/12 |

| | | | | | | | | | |
|-------------------|-------|------|--|--|--|--|--|--|--|
| 100 | SHEAR | 0.00 | | | | | | | |
| *100* | | | | | | | | | |
| Waterjet | | 0.00 | | | | | | | |
| FLOW CNC Waterjet | | | | | | | | | |

Memo

1-Cut as per Dwg
 Dwg Rev: PC1
 Prog Rev: PC1

2-Deburr if necessary

| | | | | | | | | | |
|-----------------|---------------------------------------|------|--|--|--|--|--|--|--|
| 103 | QC Inspect parts off machine FAI/FAIB | 0.00 | | | | | | | |
| *103* | | | | | | | | | |
| QC | | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

Memo

DAS 16 8-28-12

12-08-27

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|--|--|--|--|--|--|---|--|--|--|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input checked="" type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
|--|--|--|--|--|--|---|--|--|--|--|--|

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|---------|------|-----|---|------------------------------|---|------------------------------|--------------|--------------|
| Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/> | 12/8/29 | 120 | 6 | Approve preliminary part to approved dwg so part can be shipped | DAs 12 2-89 12/8/24 | Acceptable to D3189 Rev. B with accepted denotations dwg dim 11.25 is 12.00 4.13 is 4.38 R0.063 is R0.25 | DAs 12 2-89 12/8/24 | | |

| FAULT CATEGORY | | | |
|--|---|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Work Order ID 89609

August-27-12 2:02:04 PM

89609

Page 2

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 Required Date: 8/27/12 Req'd Qty: 8.00 *8* Customer:
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Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

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|---|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|--|
| 105 *105* QC Quality Control | QC8- Inspect parts - second check Memo | 0.00 0.00 | | | | | | | |
| 110 *110* Small Fab Small Fab Small Fab | Small Fab Memo 1- Roll as per Dwg D3189 | 0.00 0.00 | | | | 8 | 8 | | FF 12-08-27 |
| 120 *120* QC Quality Control | QC5- Inspect part completeness to step on W/O Memo | 0.00 0.00 | | | | | | | inspected to PC1 Dwg only. DAS 16 12/08/27 2-88 |

QC3 Apply Proseal
 12-08-27 8

12-8-27 8

NCR: Yes / No

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| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |

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Page 3

August-27-12 2:02:04 PM

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|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|-----------------|
| 130 | Identify as per dwg & Stock Location: <i>X-tube</i> | 0.00 | | | | | | | |
| *130* | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | 8 | | | <i>12.08.28</i> |
| Packaging | | | | | | | | | |
| 140 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *140* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

POSITIVE RECALL
 EFFECTIVE *208.27* AUTH *W*
 RELEASED *QR* DATE *12/8/29*
 Acceptable to D3189 Rev B

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

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QA Closed: _____ Date: _____

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| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
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Picklist Print

August-27-12 2:02:03 PM

Page 1

Work Order ID: 89609

Parent Item: D3189-1

Start Date: 8/27/12

Required Date: 8/27/12

Parent Item Name: Chafing Shield

Start Qty: 8.00

Required Qty: 8.00

Comments:

IPP B05.08.22 No longer made in-house KJ/JLM

IPP Rev: C 06-03-24 Rolling Now made in House JLM

IPP Rev: D 07-04-16 As per Rev B JLM

IPP Rev: E 11.05.11 now made on

waterjet DD verf: JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

M304S25GA

Purchased

No

100

sf

49.6000

0.32

2.6947368

304/316 .020" Sheet

FF 12-08-27

Location

Loc Qty

Loc Code

MAT020

49.6

118228

49.6

2.7

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

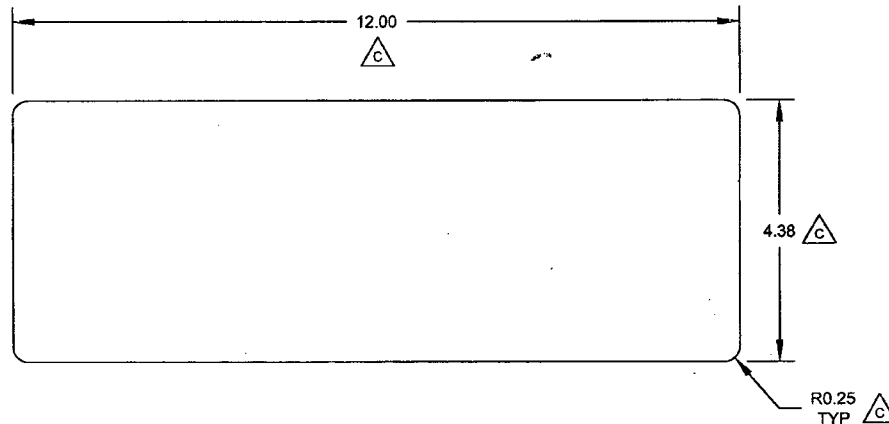
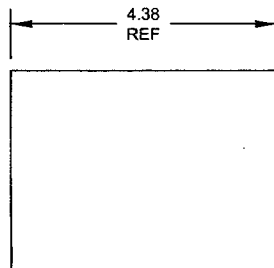
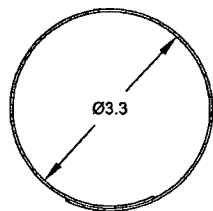
DQA: _____ Date: _____

QA Closed: _____ Date: _____

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| Material <input type="checkbox"/> | | | | | | | | | | | |
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| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |

| FAULT CATEGORY | | | |
|--|---|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Follow [



D3189-1 CHAFING SHIELD
(ROLL D3189-1F AS SHOWN)

D3189-1F FLAT PATTERN

NOTES:

- 1) MATERIAL: AISI 304/316 SS 0.020" THICK (REF. DART SPEC M304S25GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.30 lbs

PRELIMINARY ISSUE

Rev PC1

12/14/20

| PC1 | -1/3 ENLARGED TO REDUCE CHANCE OF DMG TO CROSSTUBE, ALL FILLETS INCREASED TO R0.25 | CP | 12.08.14 |
|------------|--|----|----------|
| B | ADD -3 | CP | 07.01.05 |
| A | NEW ISSUE | CP | 03.05.08 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | PC1 | | |
| DRAWN | PC1 | | |
| CHECKED | | | |
| MFG. APPR. | | | |
| APPROVED | | | |
| DE APPR. | | | |
| DATE | 12.08.14 | | |

| | |
|--|--------------|
| DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWING NO. D3189 | REV. PC1 |
| TITLE CHAFING SHIELD | SHEET 1 OF 2 |
| SCALE NTS | |

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NCR: Yes / No

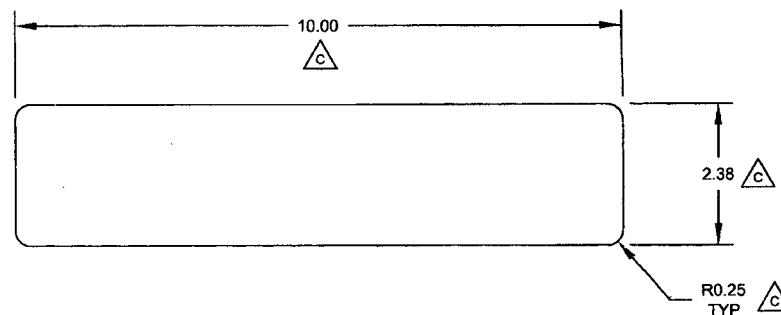
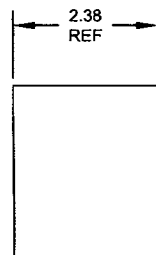
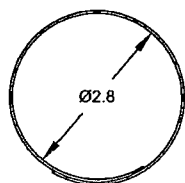
WORK ORDER NON-CONFORMANCE / UPDATE

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|--|---|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |



D3189-3F FLAT PATTERN

D3189-3 CHAFING SHIELD
(ROLL D3189-3F AS SHOWN)

NOTES:

- 1) MATERIAL: AISI 304/316 SS 0.020" THICK (REF. DART SPEC M304S25GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.13 lbs

PRELIMINARY ISSUE

Rev: PC1

12/8/20

| | | | |
|------------|----------|---|--------------|
| DESIGN | 92 | DART AEROSPACE LTD | |
| DRAWN | 92 | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. | REV. 92 |
| MFG. APPR. | | D3189 | SHEET 2 OF 2 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | CHAFING SHIELD | NTS |
| DATE | 12.08.14 | <small>COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small> | |

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

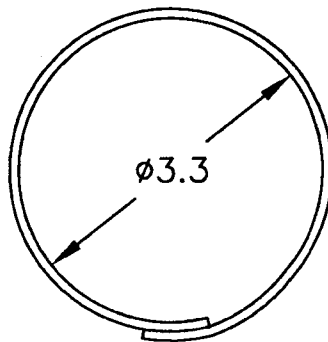
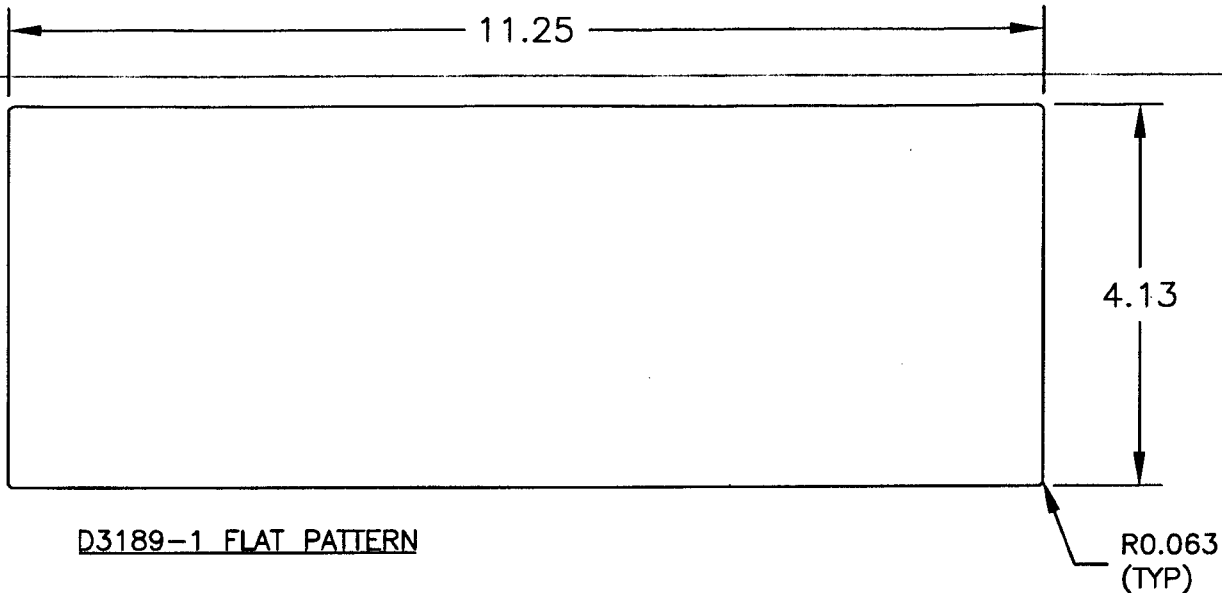
| | | | | | | | | | | | |
|---|------|------|---|---|-------------------|---|-------------|--------------|---|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | | |

DART

| | | | |
|------------------------|-------------------------|---|------------------------|
| DESIGN QP | DRAWN BY QP | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED [Signature] | APPROVED [Signature] | DRAWING NO. D3189 | REV. B SHEET 1 OF 2 |
| DATE 07.01.05 | | TITLE CHAFING SHIELD | SCALE 1:2 |
| A | 03.05.08 | NEW ISSUE | |
| B | 07.01.05 | ADD -3 | |

RELEASED

07.03.27 [Signature]



D3189-1 ROLLING DETAIL
NOT TO SCALE

D3189-1 CHAFING SHIELD

- 1) MATERIAL: AISI 304/316 SS 0.020" THICK (REF. DART SPEC M304S25GA)
- 2) FINISH: NONE
- 3) DEBURR/BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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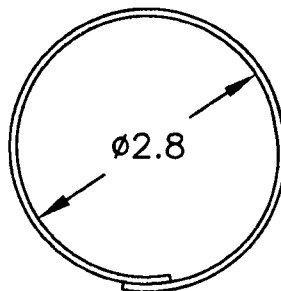
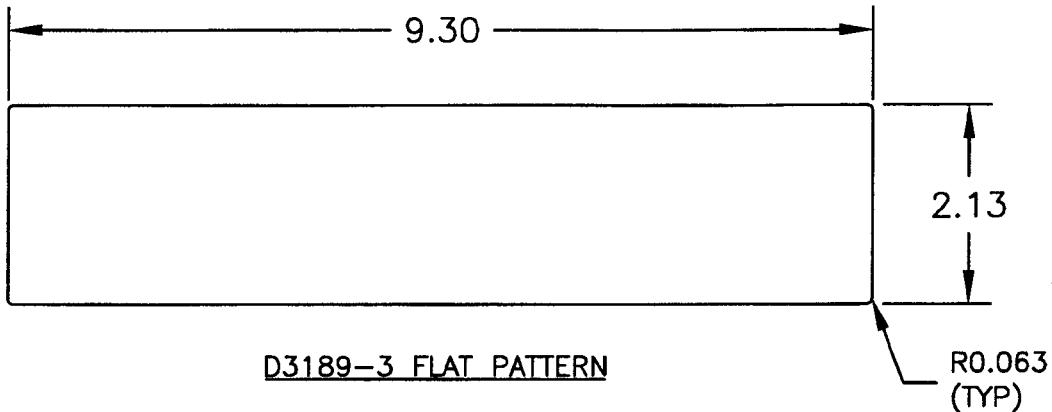
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| | | | |
|--------------------|---------------------|--|------------------------|
| DESIGN <i>qp</i> | DRAWN BY <i>qp</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>///</i> | APPROVED <i>///</i> | DRAWING NO. D3189 | REV. B SHEET 2 OF 2 |
| DATE 07.01.05 | | TITLE CHAFING SHIELD | SCALE 1:2 |

RELEASED

07.03.27 *///*



D3189-3 ROLLING DETAIL
NOT TO SCALE

D3189-3 CHAFING SHIELD

- 1) MATERIAL: AISI 304/316 SS 0.020" THICK (REF. DART SPEC M304S25GA)
- 2) FINISH: NONE
- 3) DEBURR/BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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Receiving Report

Date: 11/7/6
 Supplier: THYSCORP

Batch No: M11P228
 Dart P/O: 14402

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☒ N/A ☐
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC6 Inspection 11/07/08 N/A ☒
 Work Order

Discrepancies

| Part Number | Description | Quantity Ordered | Quantity Received | Quantity Returned | Quantity Short | Comments |
|-------------|-------------|------------------|-------------------|-------------------|----------------|----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |

Initials of receiver (if shipment OK) Level 12

Production/Admin: 11/7/08
 Date
 Received/Costing
 Initial

Location

I N V O I C E

No: PEC IV-569966

Date: 06Jul11

Due: 05Aug11

Sold By:

THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 9057389033

Remit to:

THYSSENKRUPP MATERIALS NA
c/o T27540
P.O. BOX 4275, POSTAL STATION 'A'
TORONTO, ONTARIO M5W 5V8

Sold To:

(20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Shipped To:

(1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

=====

| | | |
|-------------------------------|---------------------------------|--------------------------------|
| Shp Dt 06Jul11 | Ord Dt 04Jul11 | SO No ST-346868 B/L PEC 718824 |
| Trm NET 30 DAYS/NET 30 JOURS | PO/Ref 14402 | |
| Frnt PREPAID | Via VIM TRANSFER TR FOB CONCORD | |
| Slp STAN IVERS (905-532-1350) | Pbl | |

=====

| | | | |
|----------------------------------|---------|-------------|----------|
| 1 ALUMINUM PLATE 6061-T651 | 1 PCS | | 35 LBS |
| .50" THICK X 24.0000" X 30.0000" | | | |
| MATERIAL | 1 PCS @ | 141.9500 EA | 141.95 ✓ |
| ENERGY & CAP SURCHG | | 25.0000 LOT | 25.00 02 |

| | | | |
|----------------------------------|-----------|------------|-----------|
| 2 STAINLESS STEEL SHEET 304-2B | 3 PCS | | 124 LBS |
| .0250 Nom X 48.0000" X 120.0000" | | | |
| MATERIAL | 124 LBS @ | 2.5320 LBS | 313.97 02 |

| | | | |
|----------------|-------|-----|-----|
| Total Shipped: | 4 PCS | 159 | LBS |
|----------------|-------|-----|-----|

Interest will be charged at 1.5% per month or
18% per year on overdue accounts.

*** SALES DEPT. OFFICE HOURS ***
7:30 AM TO 5:00 PM - MONDAY TO FRIDAY
**** TEL. 800-926-2600 ****
*** CUSTOMER PICK-UP HOURS ***
*** 9:00 AM TO 4:00 PM ***
***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

* WE STOCK STAINLESS STEEL!!!! *
* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

TPS/GST TVH/HST 140223934 RT0001
TVQ - QST 1017327981 TQ0001

| | | | | | |
|----------|------------|---------|-------|-------|-----------|
| Material | Processing | Freight | Other | Taxes | TOTAL DUE |
| 455.92 | | | 25.00 | 62.52 | 543.44 |

Taxes: ONHSTS 62.52

Purchase Order Receipt Listing

Page 1 of 1

Wednesday, July 13, 2011 10:43:12 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO14402 All Receipt Dates All Line Item Types

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

[illegible]

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 9057389033

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G
No: PEC 718824
Ship Date 05Jul11 at 15:51 From PFW
Probill
Via VIM TRANSFER TRUCK
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

B I L L O F L A D I N G
1) Our Order PEC-346868- 1 Your PO # 14402
ALUMINUM PLATE 6061-T651
.50" THICK X 24.0000" X 30.0000"

Heat Number Tag No
22/03/062A0 210749

Quantity
5.00 SFT

MTR'S

PCS
1

Wt LBS
35

2) Our Order PEC-346868- 2 Your PO # 14402
STAINLESS STEEL SHEET 304-2B
.0250 Nom X 48.0000" X 120.0000"

Heat Number Tag No
YU257156 210384

Quantity
120.00 SFT

MTR'S

PCS
3

Wt LBS
124

TOTAL: Tags 2 PCS 4 LBS 159

Heat Number
22/03/062A0
YU257156

*** Chemical Analysis ***

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCED ON IT **

TOTAL (1,2) 1 PKG, 1 SKID GW. 231 LBS

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA

Page: 1Continued

1 crate
1 carton

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ETRE
RAPPORTEES IMMEDIATEMENT
ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY
RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER

RECU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION
TVO/GST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

DATE

11/7/16

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SHEET 304-2B
.0250 Nom X 48.0000" X 120.0000"
PART NO.

PO/Ref 14402


We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs

Certificate of Mill Test Results

BLPEC-718824-002

Sheet 1
Pg 1/1

Signed by:

 YIEH MAU CORP.

MILL TEST CERTIFICATES

INVOICE NO. : F10M927-1
COMMODITY : PRIME COLD ROLLED STAINLESS STEEL SHEET

SPECIFICATION : AISI 304 ASTM A240/A480 and ASME SA240/SA480
CUSTOMER : OLBERT METAL SALES LIMITED

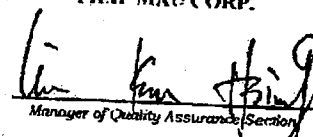
345, SHUN AN RD, LU CHU HSIANG
KAOHSIUNG HSIEN TAIWAN R.O.C
TEL: 07-6972885 FAX: 07-6979006
CERTIFICATE NO: F10M927-1
DATE OF ISSUE: 10/09/2010

| CUTTING | | OLBERT METAL SALES LIMITED | | | | | | | | | | SPECIFIC NO. F10M027-1 | | | | | | | | | | DATE OF ISSUE: 10/08/2010 | |
|-------------------|-----|----------------------------|--------|----------|----------------|---|------------------------------|-------------|-----|-----|-----------------------------|------------------------|------------|-----------|-----------|------------|------------|-----------|--|--|--|---------------------------|--|
| SIZE | NO. | Weight (N.W.) | | Heat No. | ID NO. | Physical Properties Tensile Test GL=50 mm | | | | | Chemical Composition (%) | | | | | | | | | | | | |
| | | KGS | LBS | | | Y.S. (N/mm ²) | T.S. (N/mm ²) | E.L. (%) | HKB | HV | C x100 | Si x100 | Mn x100 | P x100 | S x100 | Ni x100 | Cr x100 | N x100 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| 304 2B PI | | | | | | | | | | | | | | | | | | | | | | | |
| 11GA X 48" X 120" | 1 | 1,628 | 3,589 | YU162009 | 96S61567C-11 | 313 | 654 | 53 | 87 | 179 | 4.6 | 52 | 119 | 37 | 3 | 806 | 1804 | 2.7 | | | | | |
| 11GA X 48" X 120" | 1 | 1,628 | 3,589 | YU162009 | 96S61567C-12 | 313 | 654 | 53 | 87 | 179 | 4.6 | 52 | 119 | 37 | 3 | 806 | 1804 | 2.7 | | | | | |
| 16GA X 48" X 96" | 1 | 1,710 | 3,770 | YU162515 | 98S6092BB-3 | 298 | 624 | 57 | 79 | 152 | 5.1 | 46 | 110 | 36 | 3 | 804 | 1820 | 2.7 | | | | | |
| 16GA X 48" X 120" | 1 | 1,665 | 3,671 | YU162159 | 96S62953A-2 | 292 | 617 | 60 | 79 | 151 | 5 | 53 | 127 | 33 | 9 | 805 | 1812 | 2.6 | | | | | |
| 18GA X 48" X 120" | 1 | 1,350 | 2,976 | YU257404 | 96S61403B-6 | 295 | 657 | 55 | 85 | 172 | 4.6 | 51 | 125 | 36 | 6 | 811 | 1830 | 2.9 | | | | | |
| 18GA X 48" X 120" | 1 | 1,338 | 2,950 | YU257404 | 96S61403B-7 | 295 | 657 | 55 | 85 | 172 | 4.6 | 51 | 125 | 36 | 6 | 811 | 1830 | 2.9 | | | | | |
| 20GA X 48" X 96" | 1 | 1,334 | 2,941 | YU162157 | 97S63036B-1 | 308 | 647 | 54 | 86 | 175 | 4 | 44 | 105 | 31 | 5 | 807 | 1822 | 3.4 | | | | | |
| 20GA X 48" X 120" | 1 | 1,569 | 3,459 | YU257562 | 96S62959BA-5 | 315 | 672 | 56 | 86 | 176 | 4.3 | 48 | 114 | 37 | 1 | 805 | 1825 | 3.4 | | | | | |
| 20GA X 60" X 120" | 1 | 1,583 | 3,490 | YU257562 | 96S62959BA-3 | 315 | 672 | 56 | 86 | 176 | 4.3 | 48 | 114 | 37 | 1 | 805 | 1825 | 3.4 | | | | | |
| 22GA X 48" X 96" | 1 | 1,630 | 3,594 | YU161329 | 95S55697B-2221 | 292 | 629 | 54 | 84 | 168 | 5.1 | 41 | 108 | 37 | 6 | 809 | 1818 | 2.5 | | | | | |
| 22GA X 48" X 120" | 1 | 1,630 | 3,594 | YU161329 | 95S55697B-2222 | 292 | 629 | 54 | 84 | 168 | 5.1 | 41 | 108 | 37 | 6 | 809 | 1818 | 2.5 | | | | | |
| 24GA X 48" X 96" | 1 | 1,700 | 3,748 | YU161154 | 96S55838A-2 | 291 | 639 | 55 | 85 | 170 | 4.3 | 49 | 122 | 37 | 4 | 806 | 1807 | 2.3 | | | | | |
| 24GA X 48" X 120" | 1 | 1,652 | 3,642 | YU161154 | 95S55838A-3 | 291 | 639 | 55 | 85 | 170 | 4.3 | 49 | 122 | 37 | 4 | 806 | 1807 | 2.3 | | | | | |
| 24GA X 48" X 120" | 1 | 1,336 | 2,945 | YU257156 | 96S59278B-1 | 281 | 616 | 54 | 86 | 176 | 1.6 | 37 | 144 | 34 | 9 | 801 | 1821 | 3.2 | | | | | |
| 24GA X 48" X 120" | 1 | 1,336 | 2,945 | YU257156 | 96S59278B-2 | 281 | 616 | 54 | 86 | 176 | 1.6 | 37 | 144 | 34 | 9 | 801 | 1821 | 3.2 | | | | | |
| 24GA X 48" X 120" | 1 | 1,338 | 2,960 | YU257156 | 96S59278B-3 | 281 | 616 | 54 | 86 | 176 | 1.6 | 37 | 144 | 34 | 9 | 801 | 1821 | 3.2 | | | | | |
| 304 NO.4 LASER | | | | | | | | | | | | | | | | | | | | | | | |
| 11GA X 48" X 96" | 1 | 1,546 | 3,429 | YU162009 | 96S61567B-111 | 313 | 654 | 53 | 87 | 179 | 4.6 | 52 | 119 | 37 | 3 | 806 | 1804 | 2.7 | | | | | |
| 11GA X 48" X 120" | 1 | 1,631 | 3,596 | YU162009 | 96S61567B-112 | 313 | 654 | 53 | 87 | 179 | 4.6 | 52 | 119 | 37 | 3 | 806 | 1804 | 2.7 | | | | | |
| 11GA X 48" X 120" | 1 | 1,630 | 3,594 | YU162009 | 96S61567B-113 | 313 | 654 | 53 | 87 | 179 | 4.6 | 52 | 119 | 37 | 3 | 806 | 1804 | 2.7 | | | | | |
| 16GA X 48" X 120" | 1 | 1,690 | 3,726 | YU162547 | 98S6094A-11 | 282 | 662 | 56 | 82 | 160 | 4.4 | 47 | 119 | 32 | 10 | 804 | 1817 | 2.5 | | | | | |
| 16GA X 48" X 120" | 1 | 1,690 | 3,726 | YU162547 | 98S6094A-12 | 282 | 662 | 56 | 82 | 160 | 4.4 | 47 | 119 | 32 | 10 | 804 | 1817 | 2.5 | | | | | |
| 22GA X 48" X 96" | 1 | 1,746 | 3,849 | YU161311 | 95S55839A-12 | 294 | 659 | 53 | 85 | 173 | 4.8 | 48 | 113 | 36 | 4 | 802 | 1822 | 2.4 | | | | | |
| 22GA X 48" X 120" | 1 | 1,718 | 3,788 | YU161311 | 95S55839A-13 | 294 | 659 | 53 | 85 | 173 | 4.8 | 48 | 113 | 36 | 4 | 802 | 1822 | 2.4 | | | | | |
| 24GA X 48" X 96" | 1 | 1,604 | 3,536 | YU162639 | 98S66747B-15 | 298 | 685 | 55 | 86 | 174 | 4.8 | 49 | 122 | 37 | 11 | 804 | 1820 | 1.6 | | | | | |
| 24GA X 48" X 120" | 1 | 1,598 | 3,523 | YU162639 | 98S66747B-14 | 298 | 685 | 55 | 86 | 174 | 4.8 | 49 | 122 | 37 | 11 | 804 | 1820 | 1.6 | | | | | |
| TOTAL: | | 25 | 39,380 | 86,820 | | | | | | | | | | | | | | | | | | | |
| Remarks: | | NO MERCURY CONTAMINATION | | | | | | | | | | | | | | | | | | | | | |

Remarks: NO MERCURY CONTAMINATION
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS
BEEN MADE IN ACCORDANCE WITH THE RULES OF THE MILL CERTIFICATE

Boiled test: good for all Heat NO.

YIEH MAU CORP.


Manager of Quality Assurance Section



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PO REPRINT

Purchase Order ID PO14402

Purchase Order Date 6/30/2011

PO Print Date 7/4/2011

Page Number 1 of 2

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

Contact Name

Vendor Phone 905 669 9444

Vendor Fax 905 738 9033

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

| Line Nbr | Reference Revision ID Vendor Part Number | Description/ Mfg ID | Req Date/ Taxable | Req. Qty/ Unit of Measure | Ship Method | Unit Price | Extended Price |
|----------|--|---|----------------------|------------------------------|-------------|------------|-------------------|
| 1 | M6061T6B0.500X24.000 | 6061-T6 BAR .500" X 24.000" | 7/5/2011 Yes | 2.50 f | Yours ppd | \$56.7800 | \$141.95 |
| | | Special Inst: MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/ 4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 SIZE OF MATERIAL: .500" THICK X 24" WIDE X 30" LONG | | | | | |
| 2 | M304S25GA 622 | 304/316 .020" Sheet | 7/5/2011 Yes | 120.00 sf | Yours ppd | \$2.6375 | \$316.50 |
| | | Special Inst: MATERIAL: 304/316 SS SHEET ANNEALED 2B FINISH AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (304) OR ASTM A240 OR ASME SA240 | | | | | |

7/4/2011